



S&H Form: (2/01)  
DOCKET NO. 1081.1266

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Haruo KOIZUMI, et al.

Serial No: 10/554,098

Group Art Unit: Unassigned

Confirmation No. 6597

Filed: October 21, 2005

Examiner: Unassigned

For: PLASMA DISPLAY DEVICE AND POWER MODULE

**REQUEST FOR CORRECTED FILING RECEIPT**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

It is requested that the inventors' residences, the Assignee information, the number of independent claims, and the title on the Official Filing Receipt should be corrected. The correct inventors' residences should be reflected as **Kawasaki, JAPAN**. The title should be correctly written as **Plasma display device and power module**. The above corrections are evidenced by the executed Declaration. The number of independent claims should be correctly reflected as **2** as is evidenced by the Preliminary Amendment. The Assignment for Published Patent Application information on the Official Filing Receipt should be corrected to specify **FUJITSU HITACHI PLASMA DISPLAY LIMTED** of **Kawasaki, JAPAN**, as is evidenced by the executed Assignment, attached to the application as filed. For the convenience of the Patent and Trademark Office, attached is a photocopy of the original receipt on which the errors have been noted in red.

It is requested that a corrected Official Filing Receipt be issued in this application.

Respectfully submitted,

STAAS & HALSEY LLP

Date: Oct. 21, 2006

By: H. J. Staas  
H. J. Staas  
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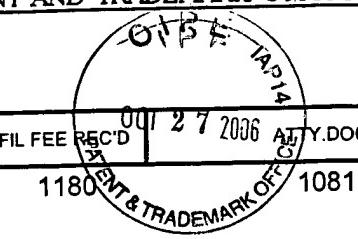
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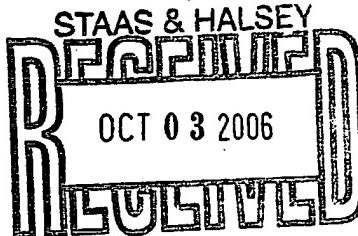
UNITED STATES PATENT AND TRADEMARK OFFICE

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APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	001 27 2006	ATTY.DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/554,098	08/18/2006	2821	1180	ENT & TRADEMARK OFFICE	1081.1266	9	23	17--2--



21171  
 STAAS & HALSEY LLP  
 SUITE 700  
 1201 NEW YORK AVENUE, N.W.  
 WASHINGTON, DC 20005



CONFIRMATION NO. 6597

## FILING RECEIPT



\*OC000000020564824\*

Date Mailed: 09/29/2006

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

## Applicant(s)

--Kawasaki--

Haruo Koizumi, [Kanagawa] JAPAN; --Kawasaki--

Makoto Onozawa, [Kanagawa] JAPAN;

-- Assignment for Published Patent Application

FUJITSU LIMITED of Kawasaki, JAPAN --

Power of Attorney: The patent practitioners associated with Customer Number 21171.

## Domestic Priority data as claimed by applicant

This application is a 371 of PCT/JP03/15629 12/05/2003

## Foreign Applications

JAPAN 2003-117082 04/22/2003

If Required, Foreign Filing License Granted: 09/23/2006

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US10/554,098**

Projected Publication Date: 01/04/2007

Non-Publication Request: No

Early Publication Request: No

Title

[Plasma display and power module] -- plasma display device and power module--

**Preliminary Class**

315

## **PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES**

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

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Title 35, United States Code, Section 184  
Title 37, Code of Federal Regulations, 5.11 & 5.15**

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# U.S. ASSIGNMENT

IN CONSIDERATION of the sum of One Dollar (\$1.00), and of other good and valuable consideration paid to the undersigned inventor(s) (hereinafter, "ASSIGNOR") by  
(Insert Name(s) & Address(es) of ASSIGNEE(S))

**FUJITSU HITACHI PLASMA DISPLAY LIMITED**

2-1, Sakado 3-chome, Takatsu-ku, Kawasaki-shi, Kanagawa 213-0012 Japan

(hereinafter, "ASSIGNEE"), the receipt of which is hereby acknowledged, the undersigned ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE the entire and exclusive right, title and interest to the invention entitled  
(Title of Invention)

## PLASMA DISPLAY DEVICE AND POWER MODULE

relating to International Patent Application PCT/JP \_\_\_\_/\_\_\_\_ and/or for which application for Letters Patent of the United States was executed on even date herewith or, if not so executed, was:

(a) executed on \_\_\_\_\_; (Insert date of execution of application, if not concurrent)

(b) filed on \_\_\_\_\_  
Serial No. \_\_\_\_/\_\_\_\_\_;

*Assignee's attorney is hereby authorized to insert in (b) the specified data, when known.*

and to said application and all Letters Patent(s) of the United States granted on said application and any continuation, division, renewal, substitute, reissue or reexamination application based thereon, for the full term or terms for which the said Letters Patent(s) may be granted and including any extensions thereof (collectively, hereinafter, "said application(s) and Letters Patent(s)").

The ASSIGNOR agree(s), when requested by said ASSIGNEE and without charge to but at the expense of said ASSIGNEE, to do all acts which the ASSIGNEE may deem necessary, desirable or expedient, for securing, maintaining and enforcing protection for said invention, including in the preparation and prosecution of said application(s) and the issuance of said Letters Patent(s), in any interference, reissue, reexamination, or public use proceeding, and in any litigation or other legal proceeding which may arise or be declared in relation to same, such acts to include but not be limited to executing all papers, including separate assignments and declarations, taking all rightful oaths, providing sworn testimony, and obtaining and producing evidence.

IN WITNESS WHEREOF, the undersigned inventor(s) has (have) affixed his/her/their signature(s).

1) <u>Haruo Koizumi</u> (Signature)	<b>Haruo KOIZUMI</b> (Type Name)	<u>Oct. 21, 2005</u> (Date)
2) <u>Makoto Onozawa</u> (Signature)	<b>Makoto ONOZAWA</b> (Type Name)	<u>Oct. 20, 2005</u> (Date)
3) _____ (Signature)	(Type Name)	(Date)
4) _____ (Signature)	(Type Name)	(Date)
5) _____ (Signature)	(Type Name)	(Date)



## Declaration and Power of Attorney for Patent Application

特許出願宣言書及び委任状

Japanese Language Declaration

日本語宣言書

私は、以下に記名された発明者として、ここに下記の通り宣言する：

As a below named inventor, I hereby declare that:

私の住所、郵便の宛先そして国籍は、私の氏名の後に記載された通りである。

My residence, post office address and citizenship are as stated next to my name.

下記の名称の発明について、特許請求範囲に記載され、且つ特許が求められている発明主題に関して、私は、最初、最先且つ唯一の発明者である（唯一の氏名が記載されている場合）か、或いは最初、最先且つ共同発明者である（複数の氏名が記載されている場合）と信じている。

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

**PLASMA DISPLAY DEVICE AND POWER MODULE**

上記発明の明細書はここに添付されているが、下記の欄がチェックされている場合は、この限りでない：

the specification of which is attached hereto unless the following box is checked:

\_\_\_\_\_ の日に出願され、  
この出願の米国出願番号またはPCT国際出願番号は、  
であり、且つ  
\_\_\_\_\_ の日に補正された出願（該当する場合）

was filed on  
as United States Application Number or  
PCT International Application Number  
and was amended on  
(if applicable).

私は、上記の補正書によって補正された、特許請求範囲を含む上記明細書を検討し、且つ内容を理解していることをここに表明する。

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

私は、連邦規則法典第37編規則1.56に定義されている、特許性について重要な情報を開示する義務があることを認める。

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.

## Japanese Language Declaration (日本語宣誓書)

私は、ここに、以下に記載した外国での特許出願または発明者証の出願、或いは米国以外の少なくとも一国を指定している米国法典第35編第365条(a)によるPCT国際出願について、同第119条(a)-(d)項又は第365条(b)項に基づいて優先権を主張するとともに、優先権を主張する本出願の出願日よりも前の出願日を有する外国での特許出願または発明者証の出願、或いはPCT国際出願については、いかなる出願も、下記の枠内をチェックすることにより示した。

I hereby claim foreign priority under Title 35, United States Code, Section 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application for which priority is claimed.

Prior Foreign Application(s)

外国での先行出願

**2003-117082**

(Number)  
(番号)

**Japan**

(Country)  
(国名)

**PCT/JP2003/15629**

(Number)  
(番号)

(Country)  
(国名)

私は、ここに、下記のいかなる米国仮特許出願についても、その米国法典第35編第119条(e)項の利益を主張する。

(Application No.)  
(出願番号)

(Filing Date)  
(出願日)

私は、ここに、下記のいかなる米国出願についても、その米国法典第35編第120条に基づく利益を主張し、又米国を指定するいかなるPCT国際出願についても、その同第365条(c)に基づく利益を主張する。また、本出願の各特許請求の範囲の主題が、米国法典第35編第112条第1段に規定された態様で、先行する米国出願又はPCT国際出願に開示されていない場合においては、その先行出願の出願日と本国内出願日またはPCT国際出願日との間の期間中に入手された情報で、連邦規則法典第37編規則1.56に定義された特許性に関する重要な情報について開示義務があることを承認する。

(Application No.)  
(出願番号)

(Filing Date)  
(出願日)

(Application No.)  
(出願番号)

(Filing Date)  
(出願日)

私は、ここに表明された私自身の知識に係わる陳述が真実であり、且つ情報と信ずることに基づく陳述が、真実であると信じられるることを宣言し、さらに、故意に虚偽の陳述などを行った場合は、米国法典第18編第1001条に基づき、罰金または拘禁、若しくはその両方により処罰され、またそのような故意による虚偽の陳述は、本出願またはそれに対して発行されるいかなる特許も、その有効性に問題が生ずることを理解した上で陳述が行われたことを、ここに宣言する。

I hereby claim the benefit under Title 35, United States Code, Section 119(e) of any United States provisional application(s) listed below.

Priority Not Claimed

優先権主張なし

**22/04/2003**

(出願日／月／年)

(Day/Month/Year Filed)

**05/12/2003**

(出願日／月／年)

(Day/Month/Year Filed)

(Application No.)  
(出願番号)

(Filing Date)  
(出願日)

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s), or 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code Section 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of application.

(Status: Patented Pending Abandoned)  
(現況：特許許可、係属中、放棄)

(Status: Patented Pending Abandoned)  
(現況：特許許可、係属中、放棄)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

**Japanese Language Declaration**  
(日本語宣誓書)

委任状： 私は本出願を審査する手続を行い、且つ米国特許商標庁との全ての業務を遂行するために、記名された発明者として、下記の弁護士及び／または弁理士を任命する。（氏名及び登録番号を記載すること）

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith (list name and registration number). Registered Practitioners associated with Customer Number 21171

The attorneys and agents of Staas & Halsey LLP under

書類送付先

Send Correspondence to:

21171

PATENT TRADEMARK OFFICE

直通電話連絡先：（氏名及び電話番号）

Please direct all communications to the following address:  
Customer No.21171

Faxsimile No. (202)434-1501  
Telephone No. (202)434-1500

唯一または第一発明者氏名		full name of solo or first inventor	
		<b>Haruo KOIZUMI</b>	
発明者の署名	日付	Inventor's signature	Date
		<i>Haruo Koizumi Oct. 21, 2005</i>	
住所	Residence		
<b>Kawasaki, Japan</b>			
国籍	Citizenship		
<b>Japan</b>			
郵便の宛先	Post Office Address		
<b>c/o FUJITSU HITACHI PLASMA DISPLAY LIMITED 2-1, Sakado 3-chome, Takatsu-ku, Kawasaki-shi, Kanagawa 213-0012 Japan</b>			
第二共同発明者がいる場合、その氏名		full name of second inventor	
		<b>Makoto ONOZAWA</b>	
発明者の署名	日付	Inventor's signature	Date
		<i>Makoto Onozawa Oct. 20, 2005</i>	
住所	Residence		
<b>Kawasaki, Japan</b>			
国籍	Citizenship		
<b>Japan</b>			
郵便の宛先	Post Office Address		
<b>c/o FUJITSU HITACHI PLASMA DISPLAY LIMITED 2-1, Sakado 3-chome, Takatsu-ku, Kawasaki-shi, Kanagawa 213-0012 Japan</b>			

（第三以下の共同発明者についても同様に記載し、署名をすること）

(Supply similar information and signature for third and subsequent joint inventors.)



Docket No.: 1081.1266

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re the Application of:

Haruo KOIZUMI, et al.

Serial No. Unassigned

Group Art Unit: Unassigned

Confirmation No. Unassigned

Filed: October 21, 2005

Examiner: Unassigned

For: PLASMA DISPLAY DEVICE AND POWER MODULE

**PRELIMINARY AMENDMENT**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

Before examination of the above-identified application, please amend the application as follows:

**IN THE SPECIFICATION:**

Please AMEND the specification by inserting before the first line the sentence:

-- This application is based on and hereby claims priority to International Application No. PCT/JP2003/015629 filed on December 5, 2003 and Japanese Application No. 2003-117082 filed on April 22, 2003, the contents of which are hereby incorporated by reference.--

**IN THE CLAIMS:**

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered). Please AMEND claims \* and ADD new claims \* in accordance with the following:

1. (ORIGINAL) A plasma display device comprising:

a power module which has a plurality of power devices; and  
temperature detecting unit installed in said power module,

wherein the temperature of said power module is controlled by feeding temperature information detected by said temperature detecting unit back to input signal control unit.

2. (ORIGINAL) The plasma display device according to claim 1, wherein when the temperature of said power module reaches or exceeds a predetermined value, the output of said power module is blocked.

3. (ORIGINAL) The plasma display device according to claim 1, wherein when the temperature of said power module rises above a predetermined value, control is performed to hold the temperature of said power module at a fixed value, and when this condition remains unchanged for a predetermined time period, the output of said power module is blocked, thereby entering a low power consumption mode.

4. (ORIGINAL) The plasma display device according to claim 1, wherein said power module is used to perform a sustain discharge on a plasma display panel.

5. (ORIGINAL) The plasma display device according to claim 1, wherein when said power module is used to display an image, said temperature information is converted into a temperature increase saturation temperature of said power module using a conversion table stored in advance in a storage device, and said converted temperature increase saturation temperature of said power module is compared with a predetermined temperature,

whereby, when said temperature increase saturation temperature of said power module is lower than said predetermined temperature, the temperature of said power module is detected by said temperature detecting unit, and

when said temperature increase saturation temperature of said power module is equal to or greater than said predetermined temperature, image quality adjustment is performed by reducing a number of sustain pulses in said sustain discharge of said plasma display panel.

6. (ORIGINAL) The plasma display device according to claim 1, wherein when said power module is used to display an image, a temperature increase saturation temperature of said power module is calculated using a coefficient stored in advance in a storage device from said temperature information, and said calculated temperature increase saturation temperature of said power module is compared with a predetermined temperature,

whereby, when said temperature increase saturation temperature of said power module is lower than said predetermined temperature, the temperature of said power module is detected by said temperature detecting unit, and

when said temperature increase saturation temperature of said power module is equal to or greater than said predetermined temperature, image quality adjustment is performed by reducing a number of sustain pulses in said sustain discharge of said plasma display panel.

7. (ORIGINAL) The plasma display device according to claim 1, wherein said temperature information detected by said temperature detecting unit is a voltage.

8. (CURRENTLY AMENDED) The plasma display device according to claim 5 or ~~claim 6~~, wherein said predetermined temperature is a solder surface prescribed temperature value.

9. (ORIGINAL) The plasma display device according to claim 1, wherein said input signal control unit control a number of pulses in said sustain discharge of said plasma display panel in accordance with said temperature information.

10. (ORIGINAL) The plasma display device according to claim 1, wherein said input signal control unit control a voltage level of said sustain discharge of said plasma display panel in accordance with said temperature information.

11. (ORIGINAL) The plasma display device according to claim 1, wherein said input signal control unit control a magnitude of a power source current used in said sustain discharge of said plasma display panel in accordance with said temperature information.

12. (ORIGINAL) The plasma display device according to claim 1, wherein said power module is disposed in a perpendicular direction to the ground, and said temperature detecting unit are disposed in an upper portion of said power module.

13. (ORIGINAL) The plasma display device according to claim 12, wherein said power module is provided in a plurality, and said temperature detecting unit are disposed in the respective upper portions of said power modules.

14. (ORIGINAL) The plasma display device according to claim 12, wherein said power module is provided in a plurality, and said temperature detecting unit is disposed in the upper portion of said power module disposed in the uppermost position.

15. (ORIGINAL) A power module which drives a plasma display panel in accordance with a signal from input signal control unit, comprising:

a plurality of power devices for generating a drive signal for said plasma display panel; and

temperature detecting unit which detects the temperature of said power module, wherein the temperature of said power module is controlled by feeding temperature information detected by said temperature detecting unit back to said input signal control unit.

16. (ORIGINAL) The power module according to claim 15, wherein when said power module temperature reaches or exceeds a predetermined value following feedback of said temperature information detected by said temperature detecting unit to said input signal control unit, the output of said power module is blocked.

17. (ORIGINAL) The power module according to claim 15, wherein said temperature information detected by said temperature detecting unit is fed back to said input signal control unit, when said power module temperature exceeds a predetermined value, control is performed to hold said power module temperature at a fixed value, and when this condition remains unchanged for a predetermined time period, the output of said power module is blocked, thereby entering a low power consumption mode.

18. (ORIGINAL) The power module according to claim 15, wherein said power module is used to perform a sustain discharge on said plasma display panel.

19. (ORIGINAL) The power module according to claim 15, wherein said temperature detecting unit comprise a temperature detection element provided in the vicinity of said power devices, and a temperature detection circuit, connected to said temperature detection element, for outputting the temperature information that corresponds to the output of said temperature detection element.

20. (ORIGINAL) The power module according to claim 15, wherein said temperature detecting unit comprise a temperature detection element provided in the vicinity of said power devices,

    said temperature detection element is connected to a temperature detection circuit provided on the exterior of said power module, and

    said temperature detection circuit outputs the temperature information that corresponds to the output of said temperature detection element.

21. (ORIGINAL) The power module according to claim 20, wherein said temperature detection element is a thermistor, and said temperature detection circuit outputs said temperature information on the basis of a resistance characteristic of said thermistor.

22. (ORIGINAL) The power module according to claim 20, wherein said temperature detection element is a diode, and said temperature detection circuit outputs said temperature information on the basis of a forward direction voltage characteristic of said diode.

23. (ORIGINAL) The power module according to claim 20, wherein said temperature detection element is a thermo-electric couple, and said temperature detection circuit outputs said temperature information on the basis of a voltage characteristic of said thermocouple.

**REMARKS**

This Preliminary Amendment is submitted to improve the form of the specification as originally filed, to perfect priority and/or parent benefit, and also to eliminate the multiple dependencies of the claims.

It is respectfully requested that this Preliminary Amendment be entered in the above-referenced application.

If there are any additional fees associated with filing of this Preliminary Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: Oct. 21, 2005

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